HIGH CAPACITY MOVABLE MERCHANDISE DISPLAY TABLE

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to the field of merchandise display fixtures and particularly to movable retail merchandise display tables which are both decorative and capable of bearing high capacity loads under both static and dynamic conditions..

2. Description of the Prior Art

The art of display fixtures for retail merchandise is practically as old as mankind itself., as has the desire to be able to easily move the display fixture when loaded with merchandise from place to place without having to remove or rearrange the displayed merchandise before, during, and/or after a relocation of the display table As such, retailers have always been faced with the dual problem of displaying merchandise in an aesthetic manner to attract the buyer as well as providing the best possible loading characteristics for the display fixture so that it doesn't collapse under the weight of the merchandise or when merchandise is moved to a new location for display. Attempts to solve this dilemma in a static display fixture have taken many forms such as illustrated, by way of example, in United States Letters Patent Nos. 5,482,238; 4,585,131; 4,898,285; 6,053,460; 5,924,663; and 5,718,398; and British Patent No. GB 2,189,138. Moreover, although attempts have been made to use concealed casters in furniture or possibly in display fixtures, such concealed casters have a tendency to break under heavy loads during movement of the table. Thus, prior art solutions,to this have failed to effectively and satisfactorily combine aesthetics and high capacity load bearing support in an attractive movable retail merchandise display table. These problems in the prior art are overcome

by the present invention which structurally integrates the decorative components of the movable display table with the dissimilar structural framework using an effective hidden caster arrangement mounted within a steel supporting member to provide a high capacity load bearing movable display table

SUMMARY OF THE INVENTION

A high capacity retail merchandise display table movable over a floor for repositioning the display table without having to disturb the merchandise includes a table top which may be spaced from the table base by steel rods to provide a floating effect, a table base having a plurality of vertically extending legs, and a plurality of structural steel supporting members extending downwardly from the legs and structurally tied thereto, with the table preferably being made of wood. The steel supporting members consist of a steel rod vertically extending from the leg and a horizontally extending tublar steel foot which forms both a structural support for the table and a caster housing for a ball bearing caster centrally mounted to a steel plate which spans the interior of the tubular foot. The ball bearing may have a diameter substantially less than the horizontal extent of the support plate to which it is mounted in the foot member.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a presently preferred embodiment of a movable merchandise display table in accordance with the present invention;

FIG. 2 is a front view of the display table of FIG. 1;

FIG. 3 is a side view of the display table of FIG. 1;

FIG. 4 is a sectional view, taken along line A in FIG. 2, of the display table of FIG. 1;

FIG. 5 is a plan view of the display table of FIG. 1;

FIG. 6 is an enlarged partial view, in section, of the leg portion of the display table of FIG. 1;

FIG. 7 is a perspective view of an alternative embodiment of the display table of FIG. 1;

FIG. 8 is a front view of the display table of FIG. 7;

FIG. 9 is a side view of the display table of FIG. 7;

FIG. 10 is a plan view of the display table of FIG. 7; and

FIG. 11 is an enlarged partial view, similar to FIG. 6, of the leg portion of the display table of FIG. 7.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now to the drawings in detail, and initially to FIGS. 1-6, the presently preferred embodiment of a high capacity movable retail merchandise display table 100 is shown. As shown and preferred, and as will be explained further, the display table preferably has hidden ball bearing casters 102 (FIG. 6) for each of the support legs 104 of the display table 100 to provide both static and dynamic support for the moving display table 100 without sacrificing any of its load bearing capacity or its aesthetics. As shown and preferred in FIG. 6, each of the support legs 104 of the table 100, which is preferably made of wood, is supported on the floor by means of a steel supporting member 106. The steel supporting member 106 preferably consists of a vertically extending steel support rod 108 which is structurally tied to and mounted in the wood support leg 104, and a steel foot member 110 integrally formed therein and which is horizontally extending to maximize its supporting surface. The foot member 110 is preferably formed of tubular steel to provide a caster cavity 112 therein. A metal plate 114 preferably horizontally spans the caster cavity 112 and is structurally tied, such as by welding, to the walls of the foot member 110. The ball bearing caster 102 is mounted in the caster cavity 112 to the metal plate 114, such as by rivets or bolts 116, to transfer any load through the structural steel

support member 106. As shown and preferred in FIG. 6, the ball bearing caster 102, which is preferably centrally mounted within the cavity 112, has a diameter which is substantially less than the horizontal extent of the plate 114 and is hidden within the cavity 112. Preferably the protrusion of the rolling surface of the ball bearing caster 102 is such that it just permits rolling movement of the display table while enabling heavy loads on the display table 100 in a static condition to be borne primarily by the support member 106. FIG. 4 illustrates the positioning of the support members 106 about the display table 100.

As further shown and preferred in FIGS. 1-6, the table top 118 may be suspended above the table base 120 which contains the wooden legs 104 , by steel support rods 122 extending vertically upward from the wooden legs 104 of the base 120 in order to provide a floating effect for the table top 118. Preferably both the steel support members 106 and the steel table top support rods 122 are made of ⅝ inch diameter steel.

Referring now to FIGS. 7-11, an alternative embodiment 200 of the movable display table of FIG. 1 is shown. As illustrated in FIGS. 7-11, the principles are the same as in the embodiment 100 of FIGS. 1-6, with the basic difference being in the aesthetics of the display table 200, such as the height of the legs, etc. These aesthetic differences do not affect the structural arrangement and high capacity support provided by the present invention. FIG. 11 is similar to FIG. 6 but does not show the ball bearing caster which is hidden from view as it would be in normal use of the table.

While the present invention has been described herein with reference to specific embodiments, those examples are intended to only be illustrative thereof and are not intended to limit the spirit or scope of the invention.